WHAT IS CLAIMED

1. A belt for a material web producing machine, comprising:

a plurality of long-chain strength supports arranged to form interstices; and

a filler at least partially filling the interstices.

2. The belt of claim 1, wherein the belt supports a paper web in the web producing machine.

3. The belt of claim 1, wherein the long-chain strength supports comprise a metal having a high thermal conductivity.

4. The belt of claim 3, wherein the metal is one of stainless steel and bronze.

5. The belt of claim 1, wherein the long-chain strength supports comprise filaments.

6. The belt of claim 5, wherein the filaments comprise a metal.

7. The belt of claim 1, wherein the long-chain strength supports comprise a substantially circular cross-section.

8. The belt of claim 1, wherein the long-chain strength supports comprise a substantially rectangular cross-section.

9. The belt of claim 1, wherein the long-chain strength supports comprise a

substantially square cross-section.

10. The belt of claim 1, wherein the long-chain strength supports comprise a substantially oval cross-section.

11. The belt of claim 1, wherein the long-chain strength supports comprise a polygonal cross-section.

12. The belt of claim 1, wherein the long-chain strength supports comprise a variable cross-sectional shape along their lengths.

13. The belt of claim 1, wherein the filler comprises a plastic.

~~14. The belt of claim 1, wherein the belt is at least substantially~~ impermeable to a fluid.

15. The belt of claim 14, wherein the fluid is a liquid.

16. The belt of claim 1, further comprising beadlike protuberances located at peripheral regions of the belt.

17. The belt of claim 16, wherein the beadlike protuberances comprise woven long-chain strength supports.

18. The belt of claim 16, wherein the beadlike protuberances comprise the woven long-chain strength supports, at least one additional material mixture, and

the filler.

sub B1 → 19. The belt of claim 1, wherein the belt comprises a surface which substantially comprises the long-chain strength supports.

20. The belt of claim 19, wherein the belt is impermeable to a fluid.

sub B2 → 21. The belt of claim 1, wherein the belt comprises a smooth surface which substantially comprises the long-chain strength supports covering the filler.

22. The belt of claim 1, wherein the belt comprises a screen.

23. The belt of claim 22, wherein the screen is flexible and formed of woven long-chain strength supports.

sub B3 → 24. The belt of claim 1, wherein the belt comprises an interwoven sheet of the long-chain strength supports.

sub A3 25. A process for producing a belt, comprising:

forming a sheet from a plurality of long-chain strength supports, the sheet comprising a plurality of interstices disposed between the long-chain strength supports; and

filling at least a portion of the interstices with a filler.

26. The process of claim 25, wherein the filler comprises a plastic.

27. The process of claim 25, wherein the long-chain strength supports comprise a metal.

28. The process of claim 25, wherein the filling further comprises:
dipping the sheet into a liquid filler.

29. The process of claim 25, wherein the filling further comprises:
spraying the sheet with a liquid filler.

30. The process of claim 25, further comprising:
smoothing at least one surface of the sheet after filling the sheet.

31. The process of claim 30, wherein the filler comprises a liquid.

32. The process of claim 30, wherein the smoothing comprises:
treating the at least one surface to remove a portion of the filler.

33. The process of claim 32, wherein the treating comprises grinding the at least one surface.

34. The process of claim 25, further comprising:
scraping at least one surface of the sheet after filling the sheet.

35. The process of claim 34, wherein the scraping comprises removing a portion of the filler from the at least one surface.

36. The process of claim 25, wherein the forming further comprises:

weaving the long-chain strength supports.

37. The process of claim 36, wherein the weaving density is adjustable based upon a desired surface requirement.

~~38.~~ The process of claim 25, further comprising:

guiding a paper web on the belt.

39. A belt for guiding a material web, comprising:

a woven metal screen;

the woven metal screen comprising metal filaments running in a longitudinal direction, the metal filaments crossing one another so as to form interstices; and

a filler which at least partially fills the interstices.

40. The belt of claim 39, further comprising at least two filaments disposed within the interstices and running substantially perpendicular to the longitudinal direction.

41. The belt of claim 40, wherein the metal comprises stainless steel.

42. A process for producing a belt, comprising:

forming a sheet from a plurality of metal filaments running in a longitudinal direction, the sheet comprising a plurality of interstices disposed between filaments;

disposing metal filaments perpendicular to the longitudinal direction and within the interstices;

filling at least a portion of the interstices with a plastic filler;

scraping a portion of the filler from at least one surface of the sheet to expose the metal filaments.

43. The process of claim 42, further comprising:

curing the filler; and

grinding the at least one surface.